



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,306	10/25/2000	Seiji Umemoto	Q61458	1186

7590 04/11/2002

Sughrue Mion Zinn MacPeak & Seas PLLC  
2100 Pennsylvania Avenue NW  
Washington, DC 20037

EXAMINER

CHOI, JACOB Y

ART UNIT	PAPER NUMBER
2875	

DATE MAILED: 04/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/695,306	UMEMOTO, SEIJI
	Examiner	Art Unit
	Jacob Y Choi	2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 29 January 2002.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-3 and 5-7 is/are rejected.

7) Claim(s) 4 and 8 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### *Drawings*

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### *Specification*

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 2, 3, 5, 6 & 7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-31 of U.S.

Art Unit: 2875

Patent No. 6,199,995 B1 & claims 1-8 of USPN 6,196,692 B1 in view of either Jannson et al. (USPN 6295405) or Sonehara (USPN 4870484). Although the conflicting claims are not identical, they are not patentably distinct from each other because:

a. Information light can be generated result of LCD layer on the lower surface of the light plate, where these information / LCD lights are transmitted and made visible through the upper surface of the light pipe (claim 17 part C of USPN 6,199,995 and claim 8 of USPN 6,196,692 B1). Missing part of claim 1, disclosed by either Jannson et al. or Sonehara (shown in Figures 9,10 or 9A) where a linear light source having an effective light emission region which is longer than a longitudinal direction of the incidence side surface

b. It would have been obvious matter of design variation to modify the a pitch in a range from 50 $\mu$ m to 1.5mm such that they range from 50 $\mu$ m to 1.0mm, since applicant fails to disclose any advantage obtained nor any problem solved by the repetitive structure of prism-like irregularities arranged at intervals of a pitch in a range of from 50 $\mu$ m to 1.0mm

c. It would have been obvious matter of design variation to modify an inclination in a range of +\_- 35 such that they range of +\_- 30, since applicant fails to disclose any advantage obtained nor any problem solved by light pipe with ridgelines each having an inclination in a range of +\_- 30.

Note: USPN 6,199,995 B1 / USPN 6,196,692 B1 discloses the light plate instead of light pipe. USPN 6,199,995 B1 / USPN 6,196,692 B1 shows the light pipe is an equivalent structure known in the art. Therefore, because these two light plate/pipe

Art Unit: 2875

were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute light plate for light pipe.

***Allowable Subject Matter***

5. Claims 4 & 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the claim recite a plane light source unit, where each of the effective light emission region of the linear light source protrudes by a distance not smaller than a value calculated by an expression:  $1\text{mm} + d * \sin \theta + d/2$ , from a corresponding end surface of the light pipe corresponding to a side in which the ridgeline of the prism-like irregularities of the light pipe drifts from the linear light source. Because none of the reference disclosed the combination, nor is there any motivation to combine them, the claims are deemed patentable over the prior art of record.

***Response to Arguments***

6. Applicant's arguments filed 01/29/2002 have been fully considered but they are not persuasive. Indicated prior art USPN 6,295,405 & USPN 4,870,484 clearly disclose a linear light source having an effective light emission region which is longer than a longitudinal direction of the incidence side surface and following subject matter is not patentably distinguishable but rather well known in the art.

***Response to Amendment***

7. Examiner acknowledges that the applicant has amended claims 1, 2 & 4, amended specification and filed a Formal Drawings (December 6, 2000) to correct previously stated drawing objection. Previously stated 35 U.S.C. 112 rejections are now withdrawn.

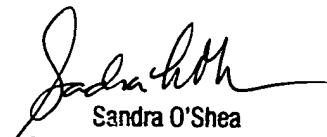
***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y Choi whose telephone number is (703) 308-4792. The examiner can normally be reached on Monday-Friday (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-8303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-7724.

JC  
April 4, 2002



Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800